

What Is Claimed Is

Sub B1
1. A programmable message delivery system for playing messages on message playback devices at one or more remote sites comprising:

5 a communication link;

a plurality of message playback devices, each of said message playback devices comprising a storage device for storing messages and for playing selected ones of said messages through an output of said message playback
10 device; and

a computer remotely located from said plurality of message playback devices and operable to generate and transmit control signals via said communication link for controlling at least one of said plurality of message
15 playback devices;

each of said plurality of message playback devices being adapted to receive said control signals via said communication link and being programmable to access at least one of said messages from said storage device and to
20 provide said accessed message to said output in accordance with said control signals.

2. A system as claimed in claim 1, wherein said communication link is selected from the group consisting of a microwave link, a radio frequency link, a satellite
25 link, a public switched telephone network, a private switched telephone network, a digital communications network, the Internet, and a fiber optic network.

Sub
B2
3. A system as claimed in claim 1, wherein said control signals are transmitted to all of said plurality of message playback devices, said control signals comprising data relating to which of said plurality of message

5 playback devices is to receive said control signals, each of said plurality of message playback devices comprising a receiver circuit for receiving said control signals and a processing device for processing said data to operate in accordance with said control signals if said control
10 signals are addressed to said message playback device.

4. A system as claimed in claim 3, wherein said data relates to subsets of said plurality of message playback devices, each of said plurality of message playback
15 devices in said subset being operable in accordance with said control signals and said remaining ones of said plurality of message playback devices being operable to disregard said control signals.

20 5. A system as claimed in claim 1, wherein said message playback device comprises an optical disc player, a processing device, a disc having tracks for storing said messages, and a receiver adapted to receive said control signals via said communication link, said control signals
25 comprising commands for said processing device to control said optical disc player to go to at least a selected one of said tracks and play a corresponding one of said messages.

5/
6/

A system as claimed in claim 1, wherein said message playback device comprises a processing device, a storage device for storing said messages as respective files, and a receiver adapted to receive said control signals via said communication link, said computer being programmable to generate said control signals comprising commands for said processing device to access at least a selected one of said files to play a corresponding one of said messages through said output.

10

6/
7/

A system as claimed in claim 1, wherein each of said message playback devices comprises at least one message output apparatus ^{comprising} ~~comprising~~ said output and selected from the group consisting of a music on-hold-compatible telephone system, an automated telephone answering system, a public address system, a visual display device, an electronically-controlled sign, an audiovisual apparatus, a videoconferencing device, and a multimedia announcement device.

B

20

8. A system as claimed in claim 1, wherein said computer comprises a display device and is programmable to generate screens on said display device for guiding an operator to make choices selected from the group consisting of which of said messages are to be played, which of said plurality of message playback devices are to play said selected messages, a time of day when said control signals are to be transmitted to said message playback devices, a date on which said control signals are to be transmitted to said

~~message playback devices, a sequence in which said selected messages are to be played, and how many times to repeat at least one of said selected messages in said sequence, and to generate said control signals to implement said choices via said message playback devices.~~

B 8. A system as claimed in claim 377, wherein at least one of said screens displays a location directory comprising a site name for each of said remote sites and guides said operator to select at least one of said remote sites, said computer being programmable to transmit said control signals to said remote sites selected by said operator.

B 9. A system as claimed in claim 377, wherein at least one of said screens displays names of regions corresponding to subsets of said remote sites and guides said operator to select at least one of said regions, said computer being programmable to generate control signals addressed to said remote sites in said regions selected by said operator.

10. A system as claimed in claim 9, wherein said subsets of said remote sites are selected from the group consisting of said remote sites located in contiguous geographical areas, said remote sites located in a plurality of noncontiguous geographical areas, said remote sites offering a similar service, and said remote sites corresponding to a particular client.

11
12. A system as claimed in claim ⁷~~8~~, wherein at least one of said screens displays at least one of a list of titles and reference codes corresponding to said messages from which said operator can select a plurality of said messages for play at said remote sites, said computer being programmable to generate a playlist comprising data relating to said plurality of messages and to generate said control signals to implement said playlist using said message playback devices.

10

Sub B3
13. A system as claimed in claim 12, wherein at least one of said screens comprises a script corresponding to at least one of said messages in said list of said messages.

13
14
15 14. A system as claimed in claim ¹¹~~12~~, wherein one of said screens comprises at least one of a current playlist and a pending playlist for a selected one of said remote sites, said current playlist and said pending playlist each comprising said reference codes corresponding to said selected messages, said pending playlist further comprising a date corresponding to when said pending playlist is to be transmitted to said message playback devices.

14
15 15. A system as claimed in claim ¹¹~~12~~, wherein said screen also displays a list of names corresponding to said remote sites and guides said operator to select said remote sites at which said messages on said playlist are to be played.

53

¹⁵
~~16.~~ A system as claimed in claim ¹⁴~~15~~, wherein said screen allows said operator to specify at least one of a plurality of parameters selected from the group consisting of a time of day when said control signals are to be transmitted to said message playback devices, a date on which said control signals are to be transmitted to said message playback devices, a sequence in which said selected messages are to be played, and how many times to repeat said selected messages in said sequence at said selected remote sites.

¹⁶
~~17.~~ A system as claimed in claim ¹¹~~12~~, wherein said screen guides said operator to select one of said messages from said playlist and an operation selected from the group consisting of adding at least one of said messages to said playlist, deleting at least one of said messages to said playlist, changing said sequence of said messages on said playlist, and changing at least one of the date or time for playing at least one of said messages.

¹⁷
~~18.~~ A programmable message delivery system for playing messages at multiple remote sites comprising:

a communication link;

a plurality of message playback devices, each of said message playback devices comprising a storage device for storing messages and for playing selected ones of said messages through an output of said message playback device; and

54

a first computer for generating and transmitting control signals via said communication link for controlling at least one of said plurality of message playback devices, each of said plurality of message
5 playback devices being adapted to receive said control signals via said communication link;

a plurality of second computers, each of said plurality of second computers being configured to communicate with said first computer and being
10 programmable to generate screens for guiding an operator to make choices selected from the group consisting of which of said messages is to be played, which of said plurality of message playback devices is to play said selected message, which of a number of subsets of said
15 plurality of message playback devices is to play said selected message, and when said selected message is to commence playing, and to transmit data signals relating to said choices to said first computer, said first computer being programmable to generate said control signals in
20 accordance with said data signals.

¹⁸
~~19.~~ A system as claimed in claim ¹⁷~~18~~, wherein each of said plurality of second computers is operable to store data selected from the group consisting of data relating to
25 each of said remote sites associated with said second computer, at least one of identification codes and titles for uniquely identifying each of said messages stored via said storage device, and message playlists comprising said

55

identification codes of selected ones of said messages for play at said associated remote sites.

¹⁹
~~20~~. A system as claimed in claim ¹⁸~~19~~, wherein said first
5 computer is operable to store said data and each of said plurality of second computers is programmable to send modifications to said data stored therein to said first computer, said first computer being programmable to update said data stored therein and to generate and transmit
10 control signals in accordance with said modifications.

²⁰
~~21~~. A system as claimed in claim ¹⁷~~18~~, further comprising a third computer for generating and transmitting said control signals via said communication link for
15 controlling at least one of said plurality of message playback devices, at least one of said plurality of message playback devices being adapted to receive said control signals from said third computer via said communication link, at least one of said plurality of
20 second computers being configured to communicate with said third computer in lieu of said first computer.

²²
~~22~~. A method of programming message playback devices located at multiple remote sites comprising the steps of:
25 storing a library of discrete and individually accessible messages at each of said remote sites;
storing at least one of a title and an identification code for uniquely identifying each said message at a

computer located remotely with respect to said message playback devices;

storing site data relating to at least a selected one of said remote sites at said computer;

5 selecting at least one said message from said library for play at said selected remote site using said computer;

generating a control signal using said computer for said message playback device corresponding to said selected remote site to play said selected message; and

10 transmitting said control signal to at least said selected remote site.

~~23.~~
23.

A method as claimed in claim 22, further comprising the steps of:

15 receiving said control signal at said selected remote site;

accessing said selected message from said library stored at said selected remote site; and

20 playing said selected message on said message playback device at said selected remote site.

24. A method as claimed in claim 22, further comprising the steps of:

25 defining a subset of said remote sites using a unique region code, said control signal comprising said region code, said transmitting step comprising the step of transmitting said control signal at least to all of said remote sites in said subset;

receiving said control signal at each of said remote sites in said subset;

accessing said selected message from said library stored at said remote sites in said subset; and

5 playing said selected message on said message playback device at each of said remote sites in said subset.

25. A method as claimed in claim 22, wherein said
10 messages are stored on at least one optical disc at each of said remote sites and each of said remote sites comprises an optical disc player, said generating step comprising the steps of:

 converting said identification code of said selected
15 message into a number for a corresponding track on said optical disc at said selected remote site; and

 generating a command for said optical disc player at said selected remote site to advance to said track and play said selected message.

20

26. A method of programming message playback devices located at multiple remote sites comprising the steps of:

 storing a library of discrete and individually accessible messages at each of said remote sites;

25 storing message data for each said message at a first computer located remotely with respect to said message playback devices;

 storing site data relating to at least two selected said remote sites at said first computer;

58

selecting different sets of said messages from said library using said first computer for play at respective said selected remote sites;

generating control signals for commanding said
5 message playback devices corresponding to said selected remote sites to play respective said sets of messages; and transmitting said control signals to at least said selected remote sites.

10 27. A method as claimed in claim 26, further comprising the steps of:

receiving said control signals at said selected remote sites;

accessing said sets of messages from said library at
15 respective said selected remote sites in accordance with said control signals; and

playing said sets of messages on said message playback devices at respective said selected remote sites.

20 28. A method of programming message playback devices located at multiple remote sites comprising the steps of:

storing a library of discrete and individually accessible messages at each of said remote sites, each message being uniquely identified by at least one of an
25 identification code and a title;

storing said at least one of said identification code and said title for each said message at a computer located remotely with respect to said message playback devices;

storing site data relating to said remote sites at said computer;

generating at least one computer screen using said computer to display a list of location names corresponding to said remote sites and a list of each said message;

entering playlist data using said at least one computer screen selected from the group consisting of said identification codes of selected ones of said messages, said titles of selected ones of said messages, times for commencing the play of said messages, and selected ones of said remote sites at which said messages are to be played; generating a control signal using said playlist data; and

transmitting said control signal to said remote sites.

29. A method as claimed in claim 28, further comprising the steps of:

receiving said control signal at said remote sites; accessing said selected messages from said library stored at respective said selected remote sites; and playing said selected messages on said message playback devices at respective said selected remote sites.

30. A programmable message delivery system for playing messages comprising:

a storage device for storing discrete, individually accessible messages;

a processor connected to said storage device and programmable to access at least one of said messages;

an input device connected to said processor;

a display device connected to said processor; and

5 at least one message output apparatus selected from the group consisting of a music on-hold-compatible telephone system, a public address system, a visual display device, an electronically-controlled sign, an audiovisual apparatus, a videoconferencing device, and a
10 multimedia announcement device, said message output apparatus comprising an input and an output, said processor being programmable to generate at least one screen on said display device to display message data relating to each of said messages, said message data
15 selected from the group consisting of a message titles corresponding to respective ones of said messages, message identification codes corresponding to respective said messages, and text of at least one of said messages, said processor being programmable to allow an operator to
20 select at least one of said messages using said message data and said input device to access said selected message via said storage device and to provide said selected message to said input via said output circuit for play through said output.

25

31. A system as claimed in claim 30, wherein said operator can select a sequence of said messages, said processor being programmable to access each of said selected messages via said storage device to provide said

messages to said input for play on said output in accordance with said sequence.

add
a/

add
B/